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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,736	11/21/2005	Takaki Sugimoto	58346US005	6659
32692 3M INNOVA	32692 7590 08/08/2007 3M INNOVATIVE PROPERTIES COMPANY		EXAMINER	
PO BOX 33427			BODAWALA, DIMPLE N	
ST. PAUL, Mi	N 55133-3427		ART UNIT	PAPER NUMBER
			1722	
			NOTIFICATION DATE	DELIVERY MODE
			08/08/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
	10/537,736	SUGIMOTO, TAKAKI
Office Action Summary	Examiner	Art Unit
	Dimple N. Bodawala	1722
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 31 Ju This action is FINAL . 2b) ☐ This Since this application is in condition for allower closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1 and 3-19 is/are pending in the application 4a) Of the above claim(s) 20-22 is/are withdrawn 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 and 3-19 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	vn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents * See the attached detailed Office action for a list 	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	· (PTO-413)
2) Notice of Preferences Cited (PTO-032) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

DETAILED ACTION

Response to Amendment

Claims 1 and 3-19 are pending.

Claim 2 is canceled.

Claims 20-22 are withdrawn.

In view of the amendment, filed on July 31, 2007, following Rejection/Objections are withdrawn for the reasons of record given in the previous office action, mailed on May 16, 2007.

- ❖ Objection of claim 13 as being of improper dependent.
- ❖ Rejection of claim 2 under 35 U S C 112, second paragraph.
- ❖ Rejection of claims 1, 3-15, and 17-19 under 35 U S C 102 (b) as being anticipated by Kikuchi et al. (U S Patent No. 6,761,607 B2).
- ❖ Rejection of claim 16 under 35 U S C 103 (a) as being unpatentable over Kikuchi et al. (U S Patent No. 6,761,607 B2) in view of Chiu et al. (U S Patent No. 6,247,986 B1).

Election/Restrictions

This application contains claims 20-22 drawn to an invention nonelected with traverse during the telephone conversation on April 26, 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant's election with traverse of claims 20-22, drawn to a method in the reply filed on July 31, 2007 is acknowledged. The traversal is on the ground(s) that Applicant has amended withdrawn claims 20-22 to also recite the features of claim 2; reconsideration of the restriction requirement is respectfully requested.

This is not found persuasive because the special technical feature linking the two inventions, the mold, does not provide a contribution over the prior art, and no single general inventive concept exists.

The requirement is still deemed proper and is therefore made FINAL.

Response to Arguments

Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1722

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al. (U S Patent No. 6,761,607 B2) in view of Woo (U S Patent No. 5,910,517).

Kikuchi ('607) discloses the mold which comprises the mold layer (4) having on the surface thereof a groove pattern of specified shape and size (See abstract; and figure 10), wherein the mold layer (4) comprises the lithium salt of an organic fluorine as an antistatic agent (See col.5 lines 11-25); wherein the lithium salt of an organic fluorine compound is blended in an amount of 0.9% by weight relative to the amount of the resin material forming the mold layer (See example 1).

Kikuchi ('607) further comprises the mold layer, which is transparent and consists of a hardened product of a curable resin material, which is selected from the group of a photo curable monomer such as acrylic monomer.

Art Unit: 1722

It further teaches that the curable resin material is selected from the group of acrylate oligomer, wherein the acrylate oligomer is selected from the group of urethane acrylate. It further teaches that the mold layer has a thickness of 500 µm (See Example 1; col.4 lines 46-56; and col.5 lines 60-63).

Kikuchi ('607) further discloses the mold with support carrying said mold layer; wherein the support is a film of plastic material and selected from the group consisting of polyethylene terephthalate (PET) with a thickness of 50 μm (See Example 1; and col. 4 lines 27-42).

Kikuchi ('607) discloses the mold is used for molding ribs of a back panel for a plasma display panel (PDP)(See col.2 lines 36·38). It further teaches that the groove pattern of the mold layer is a straight pattern composed of a plurality of grooves arranged at a constant spacing generally in parallel to each other; wherein the groove pattern of the mold layer is a lattice—shaped pattern composed of a plurality of grooves arranged so as to cross at a constant spacing generally in parallel to each other (See col.3 lines 4-7; col.4 lines 43-46; and col.7 lines 24-32). Lithium salt of an organic fluorine compound is not decomposed thermally at temperature below 200 degree C, because Lithium salt has high boiling point for decomposition thermally during the course of molding process using the mold (For further clarification see website

Art Unit: 1722

 $\frac{\text{http://www.noblemind.com/search.exe?keyword=Lithium+Boiling+Point\&var}}{\underline{=2}}).$

Kikuchi ('607) discloses all claimed structural limitations as discussed above. It further teaches that the mold layer comprises a lithium salt, but fails to teach or suggest that a lithium salt of an organic fluorine compound is selected from the group consists of CF3SO3Li, or (CnF2n+1SO2)2NLi.

In the nonanalogous art, Woo ('517) discloses a mold layer with antistatic hard coating such as lithium salt of an organic fluorine compound (perfluoro surfactant), which is consisting of CF3CO2Li (See col.6) or CF3SO3Li (See col.8, example 2).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Kikuchi ('607) by providing an antistatic agent, such as lithium salt of an organic fluorine compound either CF3CO2Li or CF3SO3Li for forming hard, an abrasion resistant, and transparent coating on the product (See col.3 lines 16-45) as suggested by Woo ('517).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al. (U S Patent No. 6,761,607 B2) in view of Woo (U S Patent No. 5,910,517) as applied to claims 1, 3-15, and 17-19 above, and further in view of Chiu et al. (U S Patent No. 6,247,986 B1).

Art Unit: 1722

Kikuchi ('607) and Woo ('517) disclose all claimed structural limitation as discussed above. Kikuchi ('607) further teaches the mold layer with the groove pattern, but Kikuchi ('607) and Woo ('517) do not disclose the depth and width of the groove at the surface of the mold layer.

Page 7

In the analogous art, Chiu (986) discloses the mold, which comprises the mold layer with the groove pattern, in which the groove pattern is defined by plane portion and grooves (See figure 1); and wherein the groove has depth of 120 μ m to 140 μ m and the width of 20 μ m to 75 μ m as measured at the surface of said mold layer (See col.5 lines 64-67).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Kikuchi ('607) and/or Woo ('517) by providing the depth and the width of the groove in the groove pattern which is measured at the surface of the mold layer because such an alignment supports the groove pattern of the layer to match closely the pitch of the electrodes across the entire width of the display area (See col.6 lines 1-6) as suggested by Chiu ('986).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE**

Page 8

Art Unit: 1722

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimple N. Bodawala whose telephone number is (571) 272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1722

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNB